

In the Claims

1. (Currently amended) A method of detecting a metastatic colorectal cancer-associated transcript in a cell from a patient, the method comprising contacting a biological sample from the patient with a polynucleotide that selectively hybridizes to a sequence ~~at least 80% identical to SEQ ID NO:29 or 31, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:31.~~
2. (Previously presented) The method of claim 1, wherein the biological sample comprises nucleic acids.
3. (Original) The method of claim 1, wherein the polynucleotide is labeled.
4. (Original) The method of claim 1, wherein the polynucleotide is immobilized on a solid surface.
5. (Canceled)
6. (Currently amended) An expression vector comprising the nucleic acid ~~of claim 5~~ sequence of SEQ ID NO:31, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:31.
7. (Original) A host cell comprising the expression vector of claim 6.
8. (Withdrawn) An isolated polypeptide which is encoded by a nucleic acid molecule having polynucleotide sequence SEQ ID NO:29 or 31.
9. (Withdrawn) An antibody that specifically binds a polypeptide of claim 8.
10. (Withdrawn) The antibody of claim 10, wherein the antibody is an antibody fragment.
11. (Withdrawn) The antibody of claim 10, wherein the antibody is a humanized antibody
12. (Withdrawn) A method of detecting a metastatic colorectal cancer cell in a biological sample from a patient, the method comprising contacting the biological sample with an antibody of claim 9.

13. (Withdrawn) The method of claim 12, wherein the antibody is labeled.
14. (Withdrawn) A method of detecting antibodies specific to metastatic colorectal cancer in a patient, the method comprising contacting a biological sample from the patient with a polypeptide encoded by a nucleic acid comprising polynucleotide sequence SEQ ID NO:29 or 31.
15. (Withdrawn) A method for identifying a compound that modulates a metastatic colorectal cancer-associated polypeptide, the method comprising the steps of:
- (i) contacting the compound with a metastatic colorectal cancer-associated polypeptide, the polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence at least 80% identical to SEQ ID NO:29 or 31; and
 - (ii) determining the functional effect of the compound upon the polypeptide.
16. (Withdrawn) The method of claim 15, wherein the functional effect is determined by measuring ligand binding to the polypeptide.
17. (Withdrawn) A method of inhibiting proliferation of a metastatic colorectal cancer-associated cell to treat colorectal cancer in a patient, the method comprising the step of administering to the subject a therapeutically effective amount of a compound that modulates a polypeptide encoded by a sequence as shown in SEQ ID NO:29 or 31.
18. (Withdrawn) A drug screening assay comprising the steps of
- (i) administering a test compound to a mammal having colorectal cancer or a cell isolated therefrom;
 - (ii) comparing the level of gene expression of a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence as shown in SEQ ID NO:29 or 31 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal, wherein a test compound that modulates the level of expression of the polynucleotide is a candidate for the treatment of colorectal cancer.

19. (Withdrawn) A pharmaceutical composition for treating a mammal having colorectal cancer, the composition comprising a compound identified by the assay of claim 18 and a physiologically acceptable excipient.

20. (Withdrawn) A method of detecting a metastatic colorectal cancer-associated polypeptide in a cell from a patient, the method comprising contacting a biological sample from the patient with a antibody that that specifically binds a polypeptide encoded by a nucleic acid molecule having polynucleotide sequence as shown in SEQ ID NO:29 or 31.

21. (Withdrawn) The method of claim 20, wherein the antibody is labeled.

22. (New) A method of diagnosing metastatic colorectal cancer in a patient, the method comprising:

- (i) obtaining a biological sample from the patient; and
- (ii) detecting the level of a polynucleotide in the sample, wherein the polynucleotide is an RNA equivalent of a nucleic acid sequence identical to SEQ ID NO:31, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:31, and wherein an increase in the level of the polynucleotide relative to a normal biological sample is indicative of cancer.

23. (New) The method of claim 22, wherein the method further comprises isolating nucleic acids from the sample.

24. (New) The method of claim 22, wherein the detecting step comprises hybridizing a labeled probe to the polynucleotide.

25. (New) The method of claim 24, wherein the probe is labeled with a fluorescent label.

26. (New) The method of claim 22, wherein the detecting step comprises hybridizing the polynucleotide to a probe that is immobilized on a solid surface.

27. (New) The method of claim 22, wherein the detecting step comprises contacting the sample with a biochip, wherein the biochip comprises the nucleic acid sequence disclosed in SEQ ID NO:31.
28. (New) A method of monitoring metastatic colorectal cancer in a patient, the method comprising:
- (i) detecting the level in said patient of an expression product of a gene encoding an amino acid sequence identical to SEQ ID NO:32, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:32;
 - (ii) comparing the level of said expression product in said human with the level of said expression product in a normal patient.
29. (New) The method of claim 28 wherein said expression product is mRNA.
30. (New) The method of claim 29 wherein said detecting step comprises hybridizing a polynucleotide probe to said mRNA, wherein said probe is complementary to said mRNA.
31. (New) The method of claim 30 wherein said polynucleotide probe is labeled.
32. (New) The method of claim 29 wherein said label is a fluorescent label.
33. (New) The method of claim 28 wherein said expression product is a polypeptide.
34. (New) The method of claim 33 wherein said detecting step comprises contacting said polypeptide with an antibody that binds to said polypeptide.
35. (New) The method of claim 34 wherein said antibody further comprises a label.
36. (New) The method of claim 35 wherein said label is a fluorescent label.